

## ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for handling multiple failures in an optical network are described herein. In one embodiment, an exemplary method includes receiving a demand for allocating a protection path that meets a set of disjointness constraints with respect to a working path, the protection path suitable to be shared with one or more other working paths, each of the working paths associated with a priority for obtaining the shared protection path, and in response to the demand, selecting a protection path that meets the set of disjointness constraints with respect to the working path and has not been shared with another working path having the same priority as the working path associated with the protection path in demand. Other methods and apparatuses are also described.